

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

23. (ALLOWED) A polarization control optical space switch comprising:
a plurality of polarization control optical switches cascaded together;
wherein each polarization control optical switch comprises:
a first polarization controller that is capable of changing the polarization of light incident thereon by one of applying voltage thereto and not applying voltage thereto;
a first element to change the optical path of light from said first polarization controller;
a delay plate to change the polarization of light incident thereon from said first element; and
a second element to change the optical path of light from said delay plate; and
a final polarization control optical switch comprising:
a second polarization controller that is capable of changing the polarization of light incident thereon by one of applying voltage thereto and not applying voltage thereto; and
a third element to change the optical path of light from said second polarization controller,
wherein said polarization control optical space switch has a plurality of inputs and the same number of outputs, and
wherein switching light from one input to one output requires controlling only one of said first, second and third elements.

24. (ALLOWED) A polarization control optical space switch according to claim 23, wherein said delay plate includes segments that do not delay light incident thereon.

25. (ALLOWED) A polarization control optical space switch according to claim 23, wherein said first element to change the optical path of light from said first polarization controller and the second element to change the optical path of light from said delay plate only change the

optical path of p-polarized light.

26. (ALLOWED) A polarization control optical space switch according to claim 23, wherein said first element to change the optical path of light from said polarization controller and the second element to change the optical path of light from said delay plate only change the optical path of s-polarized light.

27. (ALLOWED) A polarization control optical space switch according to claim 23, wherein said first element to change the optical path of light from said first polarization controller changes the optical path by moving light incident at the i -th input thereto to one of the $(i-1)$ th and $(i+1)$ th output.

28. (ALLOWED) A polarization control optical space switch according to claim 23, wherein said second element to change the optical path of light from said delay plate changes the optical path by moving light incident at an i -th input thereto to one of an $(i-1)$ th and an $(i+1)$ th output.

29. (ALLOWED) A polarization control optical space switch according to claim 23, wherein said first element to change the optical path of light from said first polarization controller is a downward polarizing beam splitter, which reflects incident light with a predetermined polarization input on the i -th input to the $(i+1)$ th output.

30. (ALLOWED) A polarization control optical space switch according to claim 23, wherein said second element to change the optical path of light from said delay plate is an upward polarizing beam splitter, which reflects incident light with a predetermined polarization input on an i -th input to an $(i-1)$ th output.

31. (ALLOWED) A polarization control optical space switch according to claim 23, wherein the first element to change the optical path of light from said first polarization controller is constructed from a polarizing beam splitter array consisting of a combination of polarizing beam splitters.

32-38. (CANCELED)